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10/782,136

02/19/2004

John F. Tyndall

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EXAMINER

NGUYEN, HIEP T

ART UNIT

PAPER NUMBER

2187

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/782,136

Applicant(s)

TYNDALL ET AL.

Examiner

Hiep T. Nguyen

Art Unit

2187

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1-23 are presented for examination.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- a. A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giorgio et al., U.S. Patent No. 6,021,431 [hereafter, Giorgio].

- a. As per claim 1:

- i. Giorgio teaches a system [figure 1] comprising:

1. A processor (14); and
2. A memory (16) coupled to the processor; wherein the processor is configured to store unit attentions received from a first target device in the memory device [figure 2, col. 4, lines 1-15].

- ii. Giorgio, however, does not teach that his processor is configured to periodically identify unnecessary ones of the unit attentions stored in the memory and eliminate one or more unnecessary ones of the unit attentions.
- iii. It has been known and commonly practiced in the pertinent art to delete or remove or eliminate unnecessary information stored in a memory [e.g., duplicate request or duplicate status information; and/or invalid information] so as to eliminate a duplication processing of the duplicated data and/or processing of an invalid data. One having ordinary skill in the art, who is familiar with such well-known feature, looks at the teaching of Giorgio, would lead he or she to further incorporate the well-known teaching into that of the Giorgio system. This is

because one having ordinary skill in the art would readily recognize that when multiple pending information relating a device stored in a buffer or queue or a memory such as that of Giorgio, there would be a strong possibility that the stored information duplicate from each other and/or that the stored information is no longer valid [necessary].

iv. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention as made to further configure the Giorgio processor to periodically identify unnecessary ones of the unit attentions stored in the memory and eliminate one or more unnecessary ones of the unit attentions. One having ordinary skill in the art would have been motivated to do so in order to eliminate the processing of duplicated or invalid data, as mentioned.

- b. As per claim 2: Giorgio also teaches the further claimed limitation of "wherein the processor is configured to store the unit attentions in a plurality of stacks, wherein each stack is associated with a corresponding target device" through stack 29s [see figure 2].
- c. As per claim 3: Giorgio also teaches the further claimed limitation through stacks 28s [see figure 2].
- d. As per claims 8-9, each of the stacks receives unit attentions from a corresponding target device [see again figure 2].
- e. As per claim 4-7: similarly to claim 1, assigning a priority to buffering information and eliminate or remove the information based on the priority has also been known and widely implemented in pertinent art. The purpose of doing is to avoid deleting or removing higher priority information from the queue, buffer or memory. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to assign priority to the unit attentions stored in the Giorgio memory (16) so as to eliminate or remove unit attentions based on the assigned priority.


- f. Claims 10-16 is basically directed to a method that comprises the steps that are carried out by the corresponding element in the claims 1-9. Accordingly, claims 10-16 are also rejected for the same reason as set forth for that in claims 1-9.
- g. Claims 17-23 is basically directed to a software product that comprises the instructions for carrying out the steps of claims 10-16. Accordingly, claims 17-23 are also rejected for the same reason as set forth for that in claims 10-16.

### ***Conclusion***

- 4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - a. Iwai et al, 6,374,161, teaches that it is not necessary to generate periodically the packet data to be transmitted beforehand, and thus the redundant process and memory area are eliminated.
  - b. Arroyo 6,718,402, teaches a method and apparatus for persistent unit attention in a fibred channel storage router.
  - c. Greene et al., 2003/0014533, teaches a method and apparatus for facilitating attention to a communication.
  - d. Hamilton et al., 2004/0064293, teaches that performance parameters are periodically stored, and which can be periodically deleted or erased from memory as duplicative.
  - e. Ishizawa, 2004/0205069, teaches a file manager for determining whether there is a duplicate file based on file ID, the last update date-and -time, and the server storage information at regular time interval, and delete duplicate file if there is any.
- 5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hiep T. Nguyen whose telephone number is (571) 272-4197. The examiner can normally be reached on Monday-Friday from 9:30 am to 6:00 pm.
- 6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Hiep T Nguyen  
Primary Examiner  
Art Unit 2187

HTN